

IX. *Notes on the Types of Oriental Carabidae in the Stettin Museum.* By H. E. ANDREWES.

[Read March 1st, 1922.]

ON becoming aware last year that the collection of the late Dr. Dohrn was now in the Stettin Museum, I wrote to the authorities there to ascertain if they would send me the types contained in it for examination. This they agreed to do, and Dr. Schroeder has recently been kind enough to send them; I take this opportunity of expressing my thanks both to him and to Dr. Janse, who brought them from Stettin, for their assistance.

Dohrn himself described, so far as I am aware, only three Eastern species, but he sent a number of insects to Putzeys, who described some of them and returned the types. Two species were also described by Chaudoir. I think it possible that other types may eventually prove to be at Stettin, but I have so far only traced twelve. One of these, *Thlibops (Scapterus) dohrni* Chaud. (Rev. et Mag. Zool. 1863, 117), is a little doubtful and cannot at present be found; Chaudoir does not say whether or not the type was unique, but Putzeys, in his *Révision Générale des Clivinides* (Ann. Soc. Ent. Belg. 1867, 10), tells us that he had seen two examples, one in Dohrn's collection and one in Chaudoir's. Mr. René Oberthür informs me that the latter specimen is now in his collection. Either one of these might be the type. I have examined the remaining eleven specimens, and, as they do not appear to be at all well known, I give a list of them below, together with such comments as appear necessary. As will be seen, one of these specimens, though labelled as the type, proves not to be the one on which the description was drawn up.

1. *Oxylobus asperulus* Chaud. (Bull. Mosc. 1857, iii, 58; *id.* Mon. des Scaritides (i), 133). A ♀ specimen from Colombo. There is no doubt that this example is the type, for Chaudoir, in his Monograph, says he no longer has it in his possession. The species is not uncommon in Ceylon, and occurs also in South India in the Nilgiri and Palni Hills.

2. *Panageaus sumatranus* Dohrn (Stett. Ent. Zeit. 1891, 253). After describing this species, which came from Sumatra, Dohrn seems to have come to the conclusion (p. 254) that it was identical with *Microcosmus flavopilosus* Laf. This is not the case, indeed it does not belong to the genus *Microcosmus* at all, but to the genus *Dischissus*. I have compared it with the example of *D. notulatus* F. (Syst. Eleuth. i, 1801, 201; Andr., Trans. Ent. Soc. Lond. 1921, 162), which Mr. Henriksen was kind enough to compare at Copenhagen with Fabricius' type, and can detect no material differences. The last joint of the palpi is not much dilated, and I conclude therefore that Dohrn's type is a ♀.

There is another example from Sumatra in the British Museum, taken at Lampong, and also specimens (not quite agreeing with the type) from Hongkong and Shanghai. Most of the examples I have seen came either from N.E. India, or Burma. The type of *D. longicornis* Schaum (Berl. Ent. Zeitschr. 1863, 84), which is apparently the same species, came from the Nilgiri Hills.

3. *Orthogonius collaris* Dohrn (Stett. Ent. Zeit. 1891, 253; Andr., Trans. Ent. Soc. 1921, 149). This species is confined, so far as is known at present, to Borneo. In my note, quoted above, I identified Dohrn's species with *O. doriae* Putz. (Chaudoir's Essai monographique sur les Orthogoniens, 104 (note)). This proves to be correct, but the type of *collaris* is evidently a rather undeveloped specimen, the elytra being of a light brown colour, whereas there are normally very dark stripes along the suture, striae 2 and 7, and intervals 4, 6, and 9. The examples which I have seen came from Pontianak, Kuching (*J. E. A. Lewis*), Quop in West Sarawak (*G. E. Bryant*), and Moorjawa, Sanga Sanga (*H. D. Jensen*).

4. *Galerita peregrina* Dohrn (Stett. Ent. Zeit. 1880, 291; Andr., Ann. Mag. Nat. Hist. (9), iii, 1919, 480). The type came from Hongkong, and judging by the description, I identified with it *G. birmanica* Bates (Ann. Mus. Civ. Gen. 1892, 385). This latter species was taken by Mr. L. Fea at Bhamo, and has also quite recently been taken by Mr. R. Vitalis de Salvaza in Tonkin and Annam: I have been able to compare with Dohrn's type examples from these localities. In length there seems to be no difference, but the specimens from Burma and Indo-China are a little wider, and the costae on the elytra a

little more sharply carinate. At most they do not form more than a local race of the Chinese species.

5. **Tachys arcuatus** Putz. (Ann. Mus. Civ. Gen. 1875, 744). This specimen was taken by Nietner in Ceylon, and is the only one I have seen. Putzeys' description is not a satisfactory one, and he makes no comparison with any other species.

The colour of the upper surface is dark red, not black, the elytra piceous towards apex; the front red round spot, which he mentions, is non-existent, the hind one is triangular rather than round, and yellow. Joint 2 of the antennae is practically as long as 3. The eyes are very moderately prominent. The frontal foveae are very short and end in a large round puncture a little before mid-eye level. The prothorax is narrow, but nevertheless slightly transverse, the sides very little rounded. The most striking character of the elytra, which Putzeys does not refer to, is the great depth of the first stria, which—except near base and apex—is deeper than in any other species known to me; the arcuate second stria, which recedes from the first in the middle of the elytron, is also very characteristic. The length is quite 3.5 mm.

About the size of *T. eueides* Bates (Ann. Mag. Nat. Hist. (5), xvii, 1886, 153), or a shade larger, colour dark red, not black, joints 5–11 of the antennae fuscous, the apical spot on the elytra smaller and lighter in colour. Head with a wider neck, the frontal foveae punctiform; prothorax less rounded at sides and less contracted behind, the transverse basal sulcus not so deep and formed chiefly by a series of five large punctures; elytra rather more convex, the two pores placed a little closer together, the first stria much more deeply impressed, the second not parallel with it but noticeably arcuate.

6. **Trechus indicus** Putz. (Stett. Ent. Zeit. 1870, 175). Putzeys says at the end of his description, "Mr. de Chaudoir m'en a communiqué un individu unique (♂) comme venant des Indes Orientales, sans autre désignation." The specimen in question is a ♂ and bears a "type" label: on the other hand, Chaudoir was not in the habit of giving away unique examples, there is a locality label "Darj." (Darjiling), and a comparison of the description with the specimen makes it quite certain that this is not really the type, which was no doubt returned to Chaudoir. Mr. René Oberthür, however, tells me that he does not think he has it.

It does not seem to me quite sure that the Stettin example belongs to the species in question, but I have compared it with the description and made one or two notes. Upperside black, elytra distinctly iridescent, front of head piceous, neck, base of prothorax in middle, and scutellary region dark red, antennae and legs testaceous red, palpi testaceous yellow. The tooth of the mentum appears to me to be simple, the palpi, which are intact (deficient in the type), are of the ordinary form, the mandibles are slightly hooked and very sharp at the apex, the second joint of the antennae is distinctly shorter and hardly any thicker than the fourth. According to Putzeys the second dorsal pore on the elytra is situated rather behind the middle, but I can see no trace of it, the only pores present being those near the base and apex of the third interval.

I have seen one other example of the species, from Kurseong, differing only in the deeper striation and puncturation of the elytra. In this example also the tooth of the mentum appears simple, and the second dorsal pore is wanting.

The only other Indian species known of this genus are *T. fasciatus* Motch. (Bull. Mosc. 1851, iv, 506), and *T. championi* Jeann. (Ann. Mag. Nat. Hist. (9), v, 1920, 109). Motchulsky's species, so far as I know, has not been identified, and it seems doubtful if it belongs to the genus at all. Of Dr. Jeannel's species I have cotypes in my collection. Compared with the Stettin example, these are a little smaller and darker, the upper surface shining black, with hardly a trace of iridescence; the head is less contracted behind, the frontal foveae, instead of being gently curved, form a distinct angle, and the joints of the antennae are much shorter; the prothorax is wider, with a deeper median line, especially behind, the posterior transverse impression more uneven; the elytra are a little less convex, narrower, the striae and their punctures less deeply impressed, the outer ones obsolescent, the recurved striae at apex much longer. Striae 3 and 4 sometimes join at apex, but do not join 2; in the Stettin example (from Darjiling) they meet, but do not join 2, whereas in the Kurseong example the three striae run together rather irregularly at the hind dorsal pore. There are in *T. championi* three dorsal pores, all comparatively small and inconspicuous; in the two other examples the middle

pore is wanting, while the front and hind pores are deeply impressed.

7. *Brosocosoma ribbei* Putz. (Stett. Ent. Zeit. 1877, 100). A well-known Sikkim species, which does not call for any special comment. The type came from Darjiling.

8. *Pristomachaerus quadricolor* Putz. (Stett. Ent. Zeit. 1877, 101). In a recent paper (Proc. Zool. Soc. Lond. 1921, 247) on the Oriental Species of the Genus *Callistominus*, I identified this species a little doubtfully with *C. eucharis* Bates (Ann. Mus. Civ. Gen. 1892, 305) from Burma. A comparison of the type with some cotypes from the Fea collection enables me to confirm this identification.

9. *Pristomachaerus quadriguttatus* Putz. (Stett. Ent. Zeit. 1877, 101). In the paper just referred to I expressed the opinion (p. 238) that Putzeys' species would probably prove to be identical with *Callistominus chalconecephalus* Wied. This proves not to be the case, nor is it the same as any of the other species referred to or described in that paper. It is to be noted that, although described from Darjiling, it bears the label "Naini Tal." The nearest and indeed a very close ally is *C. jucundus* Andr. (p. 239, Plate I, fig. 2) from the Nilgiri Hills and Kanara. *C. quadriguttatus* is of the same size, and coloured in very nearly the same way. The head differs only in the absence of the smooth area on the vertex; prothorax distinctly narrower, the sides less rounded and only slightly sinuate before base, hind angles less produced, surface a little less coarsely punctate; elytra more deeply striate, intervals of equal width, surface more coarsely punctate, yellow spots larger, the front one extending inwards to stria 6, the hind one to stria 4. In my "key to the species" Putzeys' species will stand next to mine (p. 236).

10. *Amara darjelingensis* Putz. (Stett. Ent. Zeit. 1877, 102). I do not think any author has commented on this species. The type is a ♂, and Putzeys' description, though short, seems accurate; he gives the width, however, as $3\frac{3}{4}$ mm., whereas the type is barely $3\frac{1}{4}$ mm. wide. The head is wide, the eyes flat, the frontal foveae very small, but distinctly impressed, continued backwards as a very shallow groove on each side, so as to form a slight semi-circular depression on the vertex. The prothorax is convex, transverse, strongly contracted in front, widening from apex to base, front angles rather sharp, hind angles

slightly rounded, base bordered, but the border obsolete for a short distance close to hind angles, foveae punctiform in front, shallower behind, the outer ones very small, also punctiform, hind marginal pore close to the angle; elytra a little dilated behind, widest at about middle, the striae fine and very finely punctate, slightly deeper towards apex, scutellary striole elongate, no dorsal pores and none at base of first stria.

The species has lately been taken by Mr. H. Stevens at Lachung in Sikkim, the specimens agreeing quite well with the type, but varying in colour from metallic green to dull cupreous.

11. *Calathus amaroides* Putz. (Stett. Ent. Zeit. 1877, 103). The type is a ♂ and measures 9.25×3.6 mm., though according to the author the measurements are 10.0×4.0 mm. This is exactly the size of a ♀ specimen in the British Museum, also from Darjiling, and the only other example I have seen; it differs from the type only in its rather larger size, and the finer and less clearly punctured striae of the elytra. In the type the antennae, apex of femora, tibiae, and tarsi are brownish red. Putzeys thought the insect looked like an *Amara*, but apart from its colour it appears to me to be of typical *Calathus* shape. The hind angles of the prothorax are not obtuse, but right, though rounded, the basal foveae are very slight; the elytra widen from base to basal third, and thence contract to apex. In all other respects Putzeys' account of the species appears accurate.